Abstract

Objective. To determine the fecundity and fertility of Macrobrachium amazonicum (freshwater shrimp) of the Piedemonte llanero. Materials and methods. The animals were caught at a fish farm, in the municipality of Restrepo, Meta, Colombia and transported to the fish station of the Institute of Aquaculture of the University of the Llanos. The body weight (g), and total length (mm) of mature females and the fecundity and fertility (number of eggs and larvae/female, respectively) were determined. The diameter and the length of the eggs were determined to calculate their volume. Results. The fecundity varied from 120 to 549 eggs with an average of 331 ± 93. Regarding fertility, the females showed 287 ± 19 larvae, with an interval between 102 and 703. A highly positive lineal regression (r2 between 0.85 and 0.91) was observed between fecundity and fertility, and body weight and total length (p < 0.001). The egg diameter was 750.7 ± 2.9 m (range: 500 - 1000 m) and egg length of 974.2 ± 3.6 m (525-1200 m). The egg size was 296.2 ± 9.7 m3. Conclusions. The determination of fecundity and fertility for Macrobrachium amazonicum in the Piedemonte Llanero was lower to the results obtained in other studies; however, the size of the eggs was higher. The results could infer that the species breeds throughout the year and allows easy handling and farming in captivity.

Keywords

Eggs, fish farming, freshwater shrimps.